

For . . .	For this limit . . .	You shall install and operate this continuous monitoring system . . .
<p>2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104.</p>	<p>b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO₂ (dry basis) at zero percent excess air if you use a reduction control system without incineration.</p>	<p>Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and oxygen (O₂) emissions. Calculate the reduced sulfur emissions as SO₂ (dry basis) at zero percent excess air. <i>Exception:</i> You can use an instrument having an air or SO₂ dilution and oxidation system to convert the reduced sulfur to SO₂ for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO₂ instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.</p>
	<p>a. 250 ppmv (dry basis) of SO₂ at zero percent excess air if you use an oxidation or reduction control system followed by incineration.</p>	<p>Continuous emission monitoring system to measure and record the hourly average concentration of SO₂ (dry basis), at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.</p>
	<p>b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO₂ (dry basis) at zero percent excess air if you use a reduction control system without incineration.</p>	<p>Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and O₂ emissions for each exhaust stack. Calculate the reduced sulfur emissions as SO₂ (dry basis), at zero percent excess air. <i>Exception:</i> You can use an instrument having an air or O₂ dilution and oxidation system to convert the reduced sulfur to SO₂ for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO₂ instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.</p>
<p>3. Option 2: TRS limit. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).</p>	<p>300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO₂ concentration (dry basis) at zero percent oxygen.</p>	<p>i. Continuous emission monitoring system to measure and record the hourly average concentration of TRS for each exhaust stack; this monitor must include an oxygen monitor for correcting the data for excess oxygen; or</p> <p>ii. Continuous parameter monitoring systems to measure and record the combustion zone temperature of each thermal incinerator and the oxygen content (percent, dry basis) in the vent stream of the incinerator.</p>

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TABLE 32 TO SUBPART UUU OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARDS FOR SULFUR OXIDES

As stated in §63.1568(b)(2) and (3), you shall meet each requirement in the following table that applies to you.

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For . . .	You must . . .	Using . . .	According to these require- ments . . .
1. Each new and existing sulfur recovery unit: Option 1 (Elect NSPS).	Measure SO ₂ concentration (for an oxidation or reduction system followed by incineration) or the concentration of reduced sulfur (or SO ₂ if you use an instrument to convert the reduced sulfur to SO ₂) for a reduction control system without incineration.	Data from continuous emission monitoring system.	Collect SO ₂ monitoring data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.
2. Each new and existing sulfur recovery unit: Option 2 (TRS limit).	<p>a. Select sampling port's location and the number of traverse ports.</p> <p>b. Determine velocity and volumetric flow rate.</p> <p>c. Conduct gas molecular weight analysis; obtain the oxygen concentration needed to correct the emission rate for excess air.</p> <p>d. Measure moisture content of the stack gas.</p> <p>e. Measure the concentration of TRS.</p> <p>f. Calculate the SO₂ equivalent for each run after correcting for moisture and oxygen.</p> <p>g. Correct the reduced sulfur samples to zero percent excess air.</p> <p>h. Establish each operating limit in Table 30 of this subpart that applies to you.</p> <p>i. Measure thermal incinerator: combustion zone temperature.</p>	<p>Method 1 or 1A appendix A to part 60 of this chapter.</p> <p>Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter, as applicable.</p> <p>Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.</p> <p>Method 4 in appendix A to part 60 of this chapter.</p> <p>Method 15 or 15A in appendix A to part 60 of this chapter, as applicable.</p> <p>The arithmetic average of the SO₂ equivalent for each sample during the run.</p> <p>Equation 1 of § 63.1568.</p> <p>Data from the continuous parameter monitoring system.</p> <p>Data from the continuous parameter monitoring system.</p>	<p>Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.</p> <p>Take the samples simultaneously with reduced sulfur or moisture samples.</p> <p>Make your sampling time for each Method 4 sample equal to that for 4 Method 15 samples.</p> <p>If the cross-sectional area of the duct is less than 5 square meters (m²) or 54 square feet, you must use the centroid of the cross section as the sampling point. If the cross-sectional area is 5 m² or more and the centroid is more than 1 meter (m) from the wall, your sampling point may be at a point no closer to the walls than 1 m or 39 inches. Your sampling rate must be at least 3 liters per minute or 0.10 cubic feet per minute to ensure minimum residence time for the sample inside the sample lines.</p> <p>Collect temperature monitoring data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average temperature from all the readings.</p>

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For . . .	You must . . .	Using . . .	According to these requirements . . .
	j. Measure thermal incinerator: oxygen concentration (percent, dry basis) in the vent stream.	Data from the continuous parameter monitoring system.	Collect oxygen concentration (percent, dry basis) data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average percent excess oxygen concentration.
	k. If you use a continuous emission monitoring system, measure TRS concentration.	Data from continuous emission monitoring system.	Collect TRS data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.

[67 FR 17773, Apr. 11, 2002, as amended at 70 FR 6942, Feb. 9, 2005]

TABLE 33 TO SUBPART UUU OF PART 63—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

As stated in §63.1568(b)(5), you shall meet each requirement in the following table that applies to you.

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	a. 250 pmv (dry basis) SO ₂ at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and each 12-hour rolling average concentration of SO ₂ emissions measured by the continuous emission monitoring system is less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO ₂ limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in §63.1572. You are not required to do another performance evaluation to demonstrate initial compliance.